

WHAT IS CLAIMED IS:

1. An image forming apparatus provided with a transfer unit and a record head having a plurality of record elements arranged thereon for recording dots on a recording material, the apparatus forming an image on the recording material based on a transfer operation for making the transfer unit transfer the recording material and a move operation for making the record head travel to a direction orthogonal to a transfer direction of the recording material, the image forming apparatus comprising:

a record control unit that controls the transfer unit and record head to record on the recording material a plurality of test pattern images arranged side by side in a moving direction of the record head, each of the test pattern image being composed of a first pattern image and a second pattern image, wherein

an amount of the recording material transferred by the transfer unit between recordings of the first pattern image and the second pattern image differs in each of the plurality of test pattern images.

2. The image forming apparatus as set forth in claim 1 wherein

the record control unit records the first pattern images

comprised in the plurality of test pattern images without the transfer operation for transferring the recording material.

3. The image forming apparatus as set forth in claim 1 wherein

the record control unit records the first pattern image using a first part of the record elements of the record head, and the second pattern image using a second part of the record elements which is different in position in the transfer direction of the recording material from the first part of the record elements.

4. The image forming apparatus as set forth in claim 3 wherein

the first part and the second part correspond to respective end parts of the record elements of the record head in the transfer direction of the recording material.

5. The image forming apparatus as set forth in claim 1 wherein

the record elements of the record head eject ink drops on the recording material to record dots, and

the record control unit records the test pattern image on the recording material only when the record head is moved to one predetermined direction.

6. The image forming apparatus as set forth in claim 1 wherein

the test pattern image varies its pattern according to the amount transferred by the transfer unit between recordings of the first pattern image and the second pattern image.

7. The image forming apparatus as set forth in claim 1 further comprising:

an input unit that inputs a result of visual comparison between the respective test pattern images recorded on the recording material; and

a correction unit that corrects the amount of the recording material transferred by the transfer unit based on the comparison result inputted from the input unit.

8. The image forming apparatus as set forth in claim 7 wherein

the transfer unit comprises an upstream transfer roller that transfers the recording material on an upstream side of the record head and a downstream transfer roller that transfers the recording material on a downstream side of the record head,

the record control unit records the plurality of test pattern images in an area in which the recording material is transferred only by the downstream transfer roller, and

the correction unit corrects the amount transferred by the downstream transfer roller.

9. The image forming apparatus as set forth in claim 8 wherein

the record control unit records the plurality of test pattern images in an area in which the recording material is transferred by one of only the upstream transfer roller and both of the upstream and downstream transfer rollers, and

the correction unit comprises a first correction unit that corrects the amount transferred by the upstream transfer roller based on a first input operation and a second correction unit that corrects the amount transferred by the downstream transfer roller based on a second input operation.

10. The image forming apparatus as set forth in claim 1 wherein

the transfer unit comprises a transfer roller that transfers the recording material, and

the record control unit records the test pattern images at least in two rows in the transfer direction of the recording material in different phases of the transfer roller.

11. A recording method of test pattern images in an image forming apparatus provided with a transfer unit and a record

head having a plurality of record elements arranged thereon for recording dots on a recording material, the apparatus forming an image on the recording material based on a transfer operation for making the transfer unit transfer the recording material and a move operation for making the record head travel to a direction orthogonal to a transfer direction of the recording material, the method comprising a step of:

controlling the transfer unit and record head to record on the recording material a plurality of test pattern images arranged side by side in a moving direction of the record head, each of the test pattern image being composed of a first pattern image and a second pattern image, wherein

an amount of the recording material transferred by the transfer unit between recordings of the first pattern image and the second pattern image differs in each of the plurality of test pattern images.

12. A correction method of a transfer amount of a recording material in an image forming apparatus provided with a transfer unit and a record head having a plurality of record elements arranged thereon for recording dots on a recording material, the apparatus forming an image on the recording material based on a transfer operation for making the transfer unit transfer the recording material and a move operation for making the record head travel to a direction orthogonal to a

transfer direction of the recording material, the method comprising steps of:

controlling the transfer unit and record head to record on the recording material a plurality of test pattern images arranged side by side in a moving direction of the record head, each of the test pattern image being composed of a first pattern image and a second pattern image;

inputting a result of visual comparison between the respective test pattern images recorded on the recording material; and

correcting the amount of the recording material transferred by the transfer unit based on the comparison result inputted from the input unit, wherein

the amount transferred by the transfer unit between recordings of the first pattern image and the second pattern image differs in each of the plurality of test pattern images.